CNM Seminar

Name: **Professor Michael Stroscio**
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Department of Electrical and Computer Engineering

Title: **Phonon in Quantum Confined Geometries**

When: Thursday, March 28, 2002

Where: Bldg. 401, Rm. B3100 A&B

Time: 11:00 a.m.

Host: Derrick Mancini

Abstract
M. Stroscio and M. Dutta

This review highlights the utility of the dielectric and elastic continuum models for describing phonons in nanostructures. The properties of confined, interface and propagating modes in wurtzite quantum-confined structures may be described theoretically in terms of the dielectric continuum and Loudon's model for uniaxial semiconductors. Moreover, dimensionally-confined acoustic phonon modes in nanostructures and carbon nanotubes may be described in terms of the elastic continuum models. The talk will illustrate how continuum models may be used to describe phonons in a variety of nanostructures.